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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/640,478
Filing Date: August 16, 2000
Appellant(s): SAXENA, AVINASH C.

Charles S. Fish
Reg. No. 35,870
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 4, 2007 appealing from the Office action mailed October 12, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6389460	Stewart	5-2002
6587928	Periyannan	7-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart (6389460) in view of Periyannan (6587928).

Regarding claims 1 and 11, Stewart teaches a method for communicating data comprising:

establishing at a cache server (Column 6, lines 55 – 62) a first uniform resource identifier and a header portion associated with a first content item (Column 4, lines 56 – 57; lines 35 – 37, **where the first URI is the URL received at the object storage device**);

caching a second content item corresponding to the first content item (Column 4, lines 43 – 50, **where the second content item is a version of the particular object that is stored within the object server**), the second content item identified by a second uniform resource identifier, the second uniform resource identifier comprising

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the first uniform resource identifier and information from the header portion (Column 16, lines 33 – 43, **where the second URI is the created image identification string, which includes the first URL combined with cookies and authorization information, or in otherwords, header information from the first URL request**);

receiving a first request at the cache server, the first request requesting the first content item, the first request comprising the first uniform resource identifier and the header portion (Column 13, lines 51 – 57, **where the server awaits the first URL request from the user, including the first URI requesting a html file**);

a specific transform defining an action to perform on the first uniform resource identify and the header portion (Column 16, lines 33 – 43, **wherein the transform is the creation from the first URL to the image identification string when it is decided that the image or html file is going to be stored at the object server**);

generating a second request based on the criteria, the header portion, and the first uniform resource identifier, the second request being associated with the second content item, the second request generated by combining information from the header portion and the first uniform resource identifier to yield the second uniform resource identifier (Column 4, lines 56 – 66; Column 16, lines 33 – 43, **where from the first request, the object server uses the first URL to create the image identification string in order to store and later access the second content item**); and

retrieving the second content item based on the second uniform resource identifier of the second request (Column 18, line 57 – Column 19, line 18, **where the**

image identification string is created and used to retrieve the stored image from the object server).

Stewart does not explicitly indicate comparing the first uniform resource identifier and the header portion to criteria to identify a specific transform associated with the first uniform resource identifier.

Periyannan teaches a caching system for content requests that includes a comparison of the received URL and header information with a transform criteria to determine whether the request should be passed to the data cache or forwarded straight on to the content server (Column 4, lines 59 – 64, **where the transform criteria is whether the requested object is cacheable or non-cacheable based on the URL and header information of the request**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Periyannan's teaching in Stewart's system in order to identify whether the requested object is cacheable before performing Stewart's URL transformation and cache check because it will cut down on the wasted requests to the cache server for objects that are not going to be located there.

Regarding claim 2 and 12, Stewart teaches the method for communicating data according to claims 1 and 11, wherein: the header portion comprises a hypertext transport protocol header portion; and comparing the first uniform resource identifier and the header portion to predefined criteria further comprises; examining a hypertext transport protocol identifier portion associated with the first content item; comparing the hypertext transport protocol identifier portion to the criteria; examining the hypertext

transport protocol header portion associated with the first request; and comparing the hypertext transport protocol header portion to the criteria (Column 4, lines 55 – 66; Column 8, lines 46 – 49).

Regarding claims 3 and 13, Stewart teaches the method for communicating data according to claims 2 and 12, wherein the predefined criteria comprises match criteria and an associated transform (Column 8, lines 46 – 49; Column 4, lines 57 – 63).

Regarding claims 4 and 14, Stewart teaches the method for communicating data according to claims 3 and 13, wherein the transform comprises at least one rule indicating how to modify the hypertext transport protocol identifier portion associated with the first request to generate the second request (Column 11, line 64 – Column 12, line 8).

Regarding claims 5 and 15, Stewart teaches the method for communicating data according to claims 3 and 13, wherein the transform comprises at least one rule indicating an element associated with the hypertext transport protocol header portion of the first request to be associated with the hypertext transport protocol identifier portion of the second request (Column 12, lines 5 – 19).

Regarding claims 6 and 16, Stewart teaches the method for communicating data according to claims 3 and 13, wherein the match criteria comprises at least one entry, each entry comprising a portion of a hypertext transport protocol identifier and comparing the hypertext transport protocol identifier portion to the criteria comprises comparing each entry to the hypertext transport protocol identifier portion of the first request (Column 9, lines 11 – 24).

Regarding claims 7 and 17, Stewart teaches the method for communicating data according to claims 1 and 11, wherein retrieving the second content item comprises: retrieving the second content item based on the second request from the cache server when the second content item is available from the cache server (Column 9, lines 32 – 46; Column 11, lines 13 – 26); and retrieving the first content item based on the first request from the origin server when the second content item is unavailable from the cache server (Column 9, lines 46 – 55; Column 7, lines 58 – 62).

Regarding claims 8 and 18, Stewart teaches the method for communicating data according to claims 7 and 17, wherein the second content item is related to the first content item (Column 10, lines 14 – 25).

Regarding claims 9 and 19, Stewart teaches the method for communicating data according to claims 7 and 17, wherein the second content item comprises a version of the first content item customized in response to data in the header portion associated with the first request (Column 12, lines 5 – 6).

Regarding claims 10 and 20, Stewart teaches the method for communicating data according to claims 1 and 11, wherein generating the second request comprises: adding a hypertext transport protocol identifier portion of the first request to a hypertext transport protocol identifier portion of the second request; and associating an element associated with the header portion associated with the first request with the hypertext transport protocol identifier portion of the second request (Column 4, lines 56 – 66).

(10) Response to Argument

Regarding claims 1 and 11, the appellant argues that there is no reason to combine the references, Stewart and Periyannan, and that the examiner's combination was made in hindsight.

The examiner disagrees:

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The references in this application are by no means "unrelated subject matter" as argued by the appellant. They are both embodied with the idea of improving how proxy servers in the network cache information and attempt to speed up the operation to provide better performance for the user's of the network. Stewart attempts to speed up the process of caching and retrieving cached information by creating a more concrete way of accessing stored information in the cache using more information from the request (Column 3, lines 29 – 54). That increased concreteness will lead to more cache hits on information and speedier cache hits for information. Peryannan teaches a

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system that improves the caching of objects by determining before any more operations are performed by the proxy server whether the requested information is cacheable or not (Column 2, line 65 – Column 3, line 11). The idea of determining whether an object is cacheable improves performance of the cache by avoiding the entire caching process to requests which would not benefit from the service.

One of ordinary skill in the art at the time this invention was made would look to improve the performance of a cache server and come up with these two improvements. So one would be motivated to perform the combination of the references to come up with a cache server that first checks a request to see if it is cacheable or not. If that determination is made that it would go through the steps of Stewart to transform the resource locator to benefit from Stewart's teaching of the more concrete method of storing and retrieving the cached information.

Regarding claims 1 and 11, the appellant argues that there is no reason to believe that the combination of the references, Stewart and Periyannan, would result in a system that performs the claimed limitations.

The examiner disagrees:

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The applicant seems to be attempting to blend the entire disclosure of the Stewart reference and the entire disclosure of the Periyannan reference to support his argument that there is no ability that the combination between the two would operate. The examiner contends that an improvement taught in the reference in Periyannan would be used to improve the system disclosed by the Stewart reference. The Stewart reference teaches a system for receiving requests from the user, performing a transformation on the URL and other request information, and storing versions of the content corresponding to information from that transformation. Stewart is silent to the idea of what steps to be performed when it would not be advantageous for the system to attempt to cache information received from a user request. Periyannan teaches a caching system that deals with the issue of what steps to perform on a client request where it is not advantageous to perform caching of all the information. Periyannan teaches that the system should identify when caching is not the best operation and to forward the request straight to the origin server in those situations. This teaching provides an improvement to Stewart's system by teaching Stewart's system to attempt to avoid wasting operations of caching web results that are not in the system's best interest to perform web proxy services on.

Regarding claims 1 and 11, the appellant argues that the combination of the references, Stewart and Periyannan does not disclose the idea of generating a second

request based on the specific transform, more specifically the appellant argues that Stewart performs the operations of creating an image identification string and uses it to store an image.

The examiner disagrees:

Stewart teaches a system with an improved method of storing and retrieving information in a proxy cache. This system includes using more information to create an identifier for storing and retrieving cached information (Column 16, lines 33 – 43). The examiner argues that the first URI in the claimed limitation is the URL contained in the request as disclosed in Stewart in Column 4, lines 56 – 57 and lines 35 – 37. Stewart further discloses the creating an image identification string by using the first URL and information contained in the request as seen in Column 16, lines 33 – 37. That image identification string is equivalent to the claimed invention second URI, because it is being used in Stewart to uniformly identify a resource within the proxy. The identification string is unique to the current object being requested and it provides a direct map to the location in the proxy the object is stored (Column 16, lines 49 – 56). As seen in Figure 7A, step 704 – 714, the first request is received (step 702), that request is changed into a second request, as seen in 714. That second request uses the second URI to retrieve the image from the proxy node.

(11) Related Proceeding(s) Appendix

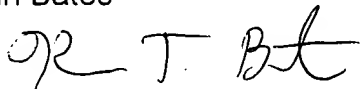
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No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Kevin Bates



Conferees:



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Saleh Najjar



SALEH NAJJAR
SUPERVISORY PATENT EXAMINER